

# Document Standards 07-15-04

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# Document Standards

## Specifications File Formats

Specifications shall be in [Construction Specifications Institute](#) (CSI) format. The "CSI Manual of Practice," is available for reference at DSC's Division of Contracting Services or for purchase through CSI. Guide Specifications in these formats are available through [Masterspec®](#).

## Specification Deliverable Formats

### Reviews:

#### **Outline Specifications**

- Paper copies as specified below.

#### **Construction Document's Specifications**

- Table of Contents: Indicate specification section number, title, and the number of sheets per section
- Font: Times New Roman 11 point
- Paper Size: 8-1/2" x 11" portrait
- Headers and Footers
  - Header and Footer Formatting shall be consistent for all specification sections
  - Spec section number and page number on the right upper corner of the footer (flush right)
  - Spec title in all caps below page number (flush right)
  - Park and PMIS and/or Package number on the upper left of footer (flush left)
    - Paper copies as specified below.

### Final Construction Documents:

#### **Same Requirements as specified above under "Construction Document's Specifications"**

- Electronic files.
  - Electronic files shall be provided in Microsoft Word (.doc) and Indexed PDF file formats.
  - Documents shall have all DSC approvals prior to making the PDF copies. (including TIC)
  - Each section shall be an individual file
  - Use CSI section number as the file name.
  - CD ROM's shall be clearly labeled with the following project information:
    - Park four-letter alpha code
    - PMIS/Package Number
    - Drawing Number
    - Project Title
    - Location within park
    - Date submitted (i.e. December 2004)
    - Name of A/E prime contractor

- Specification File Format and Media Requirements for Final Construction Documents

File Format	Media
PDF*	CD ROM
MS Word	Paper

PDF\* - Individual sections shall be linked to the table of contents and have the appearance of 1 file. Specification files shall not exceed 10MB and may need to be divided into separate volumes. Break volumes at logical breaking points i.e. between divisions. Cover sheet shall note volume and divisions included. Use Standard NPS Cover.

- Contract Price Schedule
  - MS Word or Excel format

## DSC Guide for Specifiers

- [Guide for Specifiers, January 1995](#)
- [Addenda](#)

## Cost Estimating

Use Construction Specifications Institute's (CSI) [Masterformat™](#) numbering system or UNIFORMAT II (ASTM E1557 for classification of building elements and for classification of building-related site work) for all estimates and quantity takeoffs. All estimates must provide information in a form which allows reviewers to evaluate the costs of individual items based on quantities and unit costs. All estimates are net cost only and should reflect the probable cost that contractors will bid. All overhead, profit, AE design fees and any contingency shall be computed separately and added to the total of net contractor costs. Include all costs associated with the constructability analysis.

## DSC Drawing Formats

### Review Drawings

- Half size paper prints, 11" x 17"
- Electronic files shall be provided in AutoCAD (.dwg) format.

### Final Construction Documents

- Full-size prints, 22" x 34", on 20 pound engineering white bond paper, 300 dots per inch resolution
- Drawing cover sheet shall have construction contract solicitation number affixed.
- Electronic files, (format as specified)
  - Electronic files shall be provided in AutoCAD (.dwg), PDF and TIFF file formats.
  - A/E shall ensure that all drawings are included in each format type.
  - Documents shall have all DSC approvals prior to making the PDF and TIFF copies. (including TIC)
  - Each drawing sheet shall be an individual file
  - Each PDF and TIFF file shall carry the NPS Sheet numbering file name 001, 002, 003, etc.
  - PDF and TIFF files shall be 300 ppi resolution files

- The A/E shall ensure the AutoCAD (.dwg), the TIFF and the PDF files all print as identical full size drawings.
  - CD ROMs shall be formatted single session; finalized disk; Joliet or ISO 9660 Level 2 file system
  - CD ROM's shall be clearly labeled with the following project information:
    - Park four-letter alpha code
    - PMIS/Package Number
    - Drawing Number
    - Project Title
    - Location within park
    - Date submitted (i.e. December 2004)
    - Name of A/E prime contractor
  - To create PDF's and TIFF's, scan full-size (ANSI D) drawings. Apply all Stamps and Signatures to drawings prior to scanning. Apply Contract Solicitation Number (furnished by the PM) to the cover sheet prior to scanning. If the project is going to be shelved the Contract Solicitation Number is not required prior to scanning.
- Drawing File Format and Media Requirements for Final Construction Documents

<b>File Format</b>	<b>Media</b>
TIFF	CD ROM
PDF (unzipped files)	CD ROM
PDF* (zipped files)	CD ROM
AutoCAD (.dwg)	CD ROM
Half-size	Paper
Full size (ANSI D)	Paper (Bond or 100% Cotton Vellum)
Full size (ANSI D)	Mylar** (0.004 inch thickness)

PDF\* - Sheets shall be zipped into files not exceeding 10MB. Name zipped files with included sheets (Sheets1thru20.zip)

Mylar\*\* - Mylar copies of approved 100% Construction Drawings will be required when a project is expected to be shelved for a time period of 9 months or greater before construction occurs.

## **DSC CAD Resources**

- **NPS/DSC CAD Drafting Standards**
- **Drafting Standards Checklist**
- **DSC Cad User's Guide**
- **Reference Manual 10A**
- **NPS AutoCAD Tools**
- **Drawing Templates**
- **Sheet Borders**
- **Director's Order 10B Drawing and Map Numbers (under development)**

## Miscellaneous DSC Design Narrative Formats

### DSC Editing Reference Manual

[http://workflow.den.nps.gov/staging/5\\_ProjectPlanning/editing\\_manual\\_june\\_04.pdf](http://workflow.den.nps.gov/staging/5_ProjectPlanning/editing_manual_june_04.pdf)

#### **Project Program**

- 8-1/2" x 11" portrait, with 11" x 17" fan-fold ½ size drawings, MS Word/Excel, AutoCAD, and or hand-drawn documents, TIFF or JPEG for photos, spiral-bound with cover-stock cover.

#### **Value Analysis Report**

- 8-1/2" x 11" portrait, with 11" x 17" fan-fold ½ size drawings, MS Word/Excel, AutoCAD, and or hand-drawn document,

#### **Basis of Design Report**

- 8-1/2" x 11" portrait, with 11" x 17" fan-fold ½ size drawings, MS Word/Excel, AutoCAD, and or hand-drawn documents TIFF or JPEG for photos, spiral-bound with cover-stock cover.

#### **Product File**

- 8-1/2" x 11" portrait, with 11" x 17" fan-fold drawings, MS Word/Excel, spiral-bound with cover-stock cover.

#### **Design Calculations**

- 8-1/2" x 11" portrait, MS Word/ Excel spiral-bound with cover-stock cover.

#### **Other Miscellaneous Reports and Documents**

- 8-1/2" x 11" portrait, MS Word/ Excel spiral-bound with cover-stock cover.